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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: A7694

Lothar K. FABER

Appln. No.: 09/883,357

Group Art Unit: 2872

Confirmation No.: 9655

Examiner: Thong Q. NGUYEN

Filed: June 19, 2001

For: FLUORESCENCE MICROSCOPE

**SUBMISSION OF APPELLANT'S BRIEF ON APPEAL**

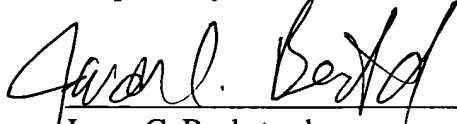
**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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MOUNTAIN VIEW OFFICE

**23493**

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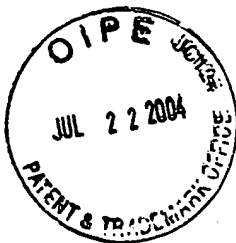
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#### APPELLANT'S BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

#### MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellant submits the following:

#### I. REAL PARTY IN INTEREST

Based on information supplied by Appellant, and to the best knowledge of Appellant's legal representatives, the real party in interest is the assignee, KRAMER SCIENTIFIC CORP.

#### II. RELATED APPEALS AND INTERFERENCES

Appellant, as well as Appellant's assigns and legal representatives, is unaware of any appeals or interferences which will be directly affected by, or which will directly affect, or have a bearing on the Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1 – 20 are pending in the application. Of the previous claims, claims 2 – 6 and 10 – 19 have been withdrawn from consideration. Claims 1, 7 – 9 and 20 are finally rejected. Thus, claims 1, 7 – 9 and 20 are the subjects of this appeal and, as finally rejected, are set forth in the attached Appendix.

### **IV. STATUS OF AMENDMENTS**

Application No. 09/883,357 was filed on June 19, 2001, with one claim, and asserted priority to Provisional Application No. 60/212,737 filed on June 20, 2000. In an amendment dated July 2, 2002, Appellant amended claim 1 and added new claims 2 – 6. In a final Office Action dated September 20, 2002, the Examiner *sua sponte* withdrew claims 2 – 6 from consideration and maintained the rejection of claim 1. By after-final Amendment (dated March 18, 2003), Appellant added new claims 7 – 11 and amended claim 1. The Examiner replied in an Advisory Action dated March 28, 2003, that Appellant's March 18, 2003, Amendment would not be entered. Subsequently, Appellant filed a Request for Continued Examination on April 21, 2003, to force entry of the March 18<sup>th</sup> Amendment (and which further included new claims 12 – 20). The Examiner *sua sponte* withdrew claims 2 – 6 and 10 – 19 from prosecution, and rejected claims 1, 7 – 9 and 20, in an Office Action dated July 9, 2003. Appellant filed an Amendment on October 9, 2003, in which claims 1, 7 – 9 and 20 were un-amended and remained pending. The Examiner finally rejected claims 1, 7 – 9 and 20 in an Office Action dated January 12, 2004, from which Appellant appeals.

## **V. SUMMARY OF THE INVENTION**

Appellant's Figure 1 shows an embodiment of the invention including a microscope body 8. The microscope body 8 comprises a stereo objective 29 and a compound objective 31. The stereo objective 29 is exchangeable in a viewing path of the microscope with the compound objective 31 through use of the objective turret with automatic shift 9. The automatic shift 9 moves the objective turret (including the desired objective held within the turret) to and from the viewing path of the microscope.

Notable claimed subject matter includes: (i) exchangeable optics including at least one compound lens 31 and one stereoscopic lens 29, and (ii) two sources of illumination (1 and 7), including a first light for brightfield illumination a and a second light for fluorescent illumination 7. Additional notable subject matter includes the features of: a third, compound, objective (see Figure 5, elements 31); automated objectives 9; and an automated prism shift mechanism 28.

During stereoscopic observation, the prism (see element 25 of Fig. 4) is automatically moved out of the viewing path of the microscope by auto prism shift mechanism 28. During compound observation, the prism 25 is automatically shifted into a viewing path of the microscope by auto prism shift mechanism 28. When prism 25 is in a viewing path of the microscope, the prism 25 takes a single beam path of observable light and splits the beam into a binocular image for binocular viewing. (The prism 25 is capable of being manually moved out of the viewing path.)

The microscope may include more than one compound objective (for instance, see Figure 5, compound objectives 31). A fluorescence filter module 36 (see Figure 7A) allows for one

filter module to be utilized for any of three viewing techniques: stereo 3D, compound 2D, and macro.

## VI. ISSUES

**First Issue:** Is claim 1 unpatentable over **Fehr (4,697,893)** in view of **Koyama (6,226,118)** under 35 USC §103(a)?

**Second Issue:** Is claim 7 unpatentable over **Fehr (4,697,893)** in view of **Koyama (6,226,118)** under 35 USC §103(a)?

**Third Issue:** Are claims 8 and 20 unpatentable over **Fehr (4,697,893)** in view of **Koyama (6,226,118)** under 35 USC §103(a)?

**Fourth Issue:** Is claim 9 unpatentable over **Fehr (4,697,893)** in view of **Koyama (6,226,118)** under 35 USC §103(a)?

## VII. GROUPING OF CLAIMS

Independent claim 1 stands and falls singularly. Claim 1 includes the features of a microscope with a stereo objective and a compound objective, a light for providing brightfield illumination for use with both the stereo and compound objectives, a light for providing fluorescent illumination for use with both the stereo and compound objectives, and a housing for housing the objectives, wherein the housing is enabled to swap the objectives in a viewing path of the microscope. These combinations of features are not in any cited art and therefore form an independent basis for patentability.

Claim 7 stands and falls singularly. Claim 7 recites the features of claim 1, but further including two compound objectives. These combinations of features are not in any cited art and therefore form an independent basis for patentability.

Claims 8 and 20 stand or fall together because these claims recite the features of claim 1, but further including the ability of the objective housing to automatically swap objectives. These combinations of features are not in any cited art and therefore form an independent basis for patentability.

Claim 9 stands and falls singularly. Claim 9 recites the features of claim 1, but further including a prism mechanism capable of being positioned in an automated fashion in the path of a single-axis image for creating binocular images from the single-axis image. These features are not in any cited art and therefore form an independent basis for patentability.

## VIII. ARGUMENTS

### 1. First Issue: Claim 1 is Patentable over Fehr (4,697,893) in View of Koyama (6,226,118) Under 35 USC §103(a)

#### A. Case Law and Patent Procedure

For a 35 U.S.C. § 103 rejection to be proper, due consideration must be given to all arguments and all secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992); *see also* M.P.E.P. § 2142. Additionally,

... [a] decision to make or maintain a rejection in the face of all the evidence must show that it was based on the totality of the evidence. *Facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion of obviousness was reached, not against the conclusion itself.*

*Id.* (Emphasis added.)

In the present obviousness rejection of claim 1, the conclusion of obviousness itself has been (incorrectly) measured against the rebuttal evidence provided by the Applicant, and the

rebuttal evidence has not been evaluated along with the facts on which the conclusion of obviousness was reached. These errors in examination are explained below.

**B. Facts of the Instant Application**

The Examiner fails to analyze important secondary considerations presented by the Appellant in the Amendment filed October 9, 2003, as evidenced by the Examiner stating:

... [w]ith regard to applicant's arguments concerning the copy of the inventive device by a different party as stated in the Declaration, applicant's bare statement that a different party is [sic: has] copied the inventive device as stated is not sufficient because applicant has failed to file written evidence to show that the party has tried for a substantial length of time to design a product similar to the claimed invention, but failed and then copied the claimed invention instead.

*See* the Office Action dated January 12, 2004, at page 6.

Contrary to the Examiner's assertions, however, the Amendment filed October 9, 2003, included clear and convincing evidence beyond "bare statements" that the invention claimed by the Appellant in the instant application was being copied by a competitor. The clear and convincing evidence included:

- (i) brochures from Leica Microsystems (a competitor of Kramer Scientific Corp., the assignee of the instant application) that substantiate that Leica Microsystems has copied the invention as claimed by the instant application (even going so far as to call Applicant's claimed invention "a thorn in our side" (*see* the Amendment October 9, 2003, Addendum "A," page 5; *see also* Addendums "A" and "B" in their entirety as shown in the October 9, 2003, Amendment); and
- (ii) the affidavit of Mr. Neil Grossman, the President of Kramer Scientific Corporation (the assignee to the instant application), that further substantiates and verifies that the invention of the instant application has been copied by Leica Microsystems.

The brochures from Leica Microsystems were filed as Addendums "A" and "B" in the October 9, 2003, Amendment. The fact that Leica copied Kramer Scientific's M2-Bio microscope

(the microscope of the instant application) is evidenced in Addendum "A," where, at pages 4 and 5, the Leica brochures state that the competing Leica device ("the Fluo Combi") was developed due to competitive pressure resulting from the introduction of the M2-Bio into the market. Further, Addendums "A" and "B" clearly establish that all of the limitations of Appellant's independent claim 1 are included in the Leica device, as shown in the following claim chart:

<b><u>Appellant's Claim 1</u></b>	<b><u>Leica Device Shown in the Leica Brochures (Introduced as Addendums "A" and "B" of the October 9, 2003, Amendment)</u></b>
A microscope for viewing samples stereoscopically or compoundly, said microscope comprising:	<i>See, e.g.,</i> the entirety of Addendum "A," and, specifically, page 12 of Addendum "A" (1 stereo, 2 compound objectives); <i>see also</i> , page 3 of Addendum "B" (technical specifications).
a stereo objective;	<i>See</i> page 12 of Addendum "A" (1 stereo, 2 compound objectives); <i>see also</i> , page 3 of Addendum "B" (technical specifications).
a compound objective;	<i>See</i> page 12 of Addendum "A" (1 stereo, 2 compound objectives); <i>see also</i> , page 3 of Addendum "B" (technical specifications).
an objective housing, said objective housing holding said stereo and said compound objective, said objective housing enabled to swap said stereo objective with said compound objective or said compound objective with said stereo objective in a viewing path of the microscope;	<i>See</i> page 4 of Addendum "A" ("rapid switching between high and low mag"); <i>see also</i> , page 2 of Addendum "B" (beginning with the heading: "quickly switch between stereo and compound microscopes objectives"); and page 3 of Addendum "B" (technical specifications).
a microscope body;	<i>See</i> , page 3 of Addendum "B" (technical specifications).
a light for providing brightfield illumination for use with both the stereo and compound objectives; and	<i>See</i> the figure on page 8 of Addendum "A" (note the "BF" for "brightfield light" and "EF" for fluorescent excitation light); <i>see also</i> , page 3 of Addendum "B" (3 <sup>rd</sup> beam is for fluorescent light and other two beams are for brightfield light).
a light for providing fluorescent illumination for use with both said stereo and compound objectives.	<i>See</i> the figure on page 8 of Addendum "A" (note the "BF" for "brightfield light" and "EF" for fluorescent excitation light); <i>see also</i> , page 3 of Addendum "B" (3 <sup>rd</sup> beam is for fluorescent light and other two beams are for brightfield light).



**C. Application of the Law to the Facts**

As described above, it is obvious from the Leica brochures submitted as Addendums "A" and "B" in the October 9, 2003, Amendment, that the Leica device is a copy of the invention claimed by the instant application.

Appellant respectfully submits that clear and convincing evidence of a competitor copying the invention of the instant application has been submitted (as shown in Addendums "A" and "B," and the Declaration of Mr. Neil Grossman), but that such evidence has not been weighed along with the facts on which the conclusion of obviousness was reached. Instead, the conclusion of obviousness has been improperly weighed against the secondary evidence provided by Addendums "A" and "B" of the October 9, 2003, Amendment.

As described in part VIII (1)(B), above, the Examiner arbitrarily dismisses Applicant's secondary evidence. Because of the Examiner's improper, capricious and arbitrary dismissal of the Appellant's important secondary considerations, it is impossible for "due consideration . . . [to] be given to any arguments and *any secondary evidence*." *In re Oetiker* (Fed. Cir. 1992); see also M.P.E.P. § 2142. (Emphasis added.) Because the facts submitted as secondary evidence have been arbitrarily and capriciously dismissed, it is impossible for "[f]acts established by rebuttal evidence. . . [to] be evaluated along with the facts on which the conclusion of obviousness. . . [has been] reached. . ." *Id.*

**D. Further Discussion / Conclusion as to the First Issue**

Appellant respectfully points out that the patents used by the Examiner to reject Appellant's claim 1 provide very little disclosure in the area of light systems to be used with different objective lenses. Indeed, in the Fehr reference (U.S.P. No. 4,697,893) there is ABSOLUTELY NO discussion, teaching or suggestion of any type of light system, let alone combinations of light systems for use with various, different objective lenses (as claimed by Appellant's claim 1). The only two references to "light" within the Fehr reference lead the ordinarily skilled artisan to believe that Fehr's light comes from ambient sources, such as the sun or environmental lighting (*see* Col. 3, lines 10 – 14 and lines 52 – 54).

Further, in the Koyama reference (U.S.P. No. 6,226,118), there is ABSOLUTELY NO discussion, teaching or suggestion of stereoscopic lenses (as claimed by Applicant's claim 1). Koyama merely relates to simple, ordinary lenses (*see* Col. 7, lined 33 – 36). Because Koyama fails to teach or suggest stereoscopic lenses, it is impossible for the reference to teach or suggest particular light systems for use with stereoscopic lenses.

In light of the deficiencies of the Fehr and Koyama references, Appellant stridently asserts that if any obviousness rejection can be made at all based solely on the combination of Fehr and Koyama, such a rejection barely amounts to a preponderance.<sup>1</sup> When further combining Appellant's secondary evidence, however (as noted above in Parts VIII (A-C) of this paper: a competitor copying the claimed device), it is clear that any preponderance is lost, and therefore the

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<sup>1</sup> An obviousness rejection under 35 U.S.C. § 103 requires a minimum threshold of a preponderance of the evidence. *See* M.P.E.P. § 2142; *see also In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

Examiner's obviousness rejection based on the Fehr and Koyama references is improper and should be overturned. Accordingly, Appellant respectfully requests such relief from the Board.

**2. Second Issue: Claim 7 is Patentable over Fehr (4,697,893) in View of Koyama (6,226,118) Under 35 USC §103(a)**

Claim 7 depends from claim 1 and is therefore patentable for the same reasons finding claim 1 patentable, as described in Part VIII(1), above.

Additionally, claim 7 also recites the structure of a second compound objective lens that is swappable with the other compound objective lens and a stereoscopic lens. Because neither Fehr or Koyama teach or suggest the claimed combination, the Examiner's rejection is improper. See M.P.E.P. § 2143.03 ("all claim limitations must be taught or suggested" to establish a *prima facie* case of obviousness.) Accordingly, Appellant prays for relief from the Board that the Examiner's stance be overturned as the Fehr and Koyama references are deficient in teaching or suggesting a second compound objective in the claimed combination.

**3. Third Issue: Claims 8 and 20 are Patentable over Fehr (4,697,893) in View of Koyama (6,226,118) Under 35 USC §103(a)**

Claim 8 and 20 depend from claim 1 and are therefore patentable for the same reasons finding claim 1 patentable, as described in Part VIII(1), above.

Further, claims 8 and 20 each recite the features of the objective housing swapping the objectives in an automated fashion. At least because the Examiner's mere suggestion to combine fails to amount to a *prima facie* case of obviousness, the rejection is therefore improper. See M.P.E.P. § 2143.01 (the mere fact that references might be capable of being combined fails to establish *prima facie* obviousness). Accordingly, Appellant prays for relief from the Board that

the Examiner's stance be overturned as the Fehr and Koyama references fail to establish a *prima facie* case of obviousness.

**4. Fourth Issue: Claim 9 is Patentable over Fehr (4,697,893) in View of Koyama (6,226,118) Under 35 USC §103(a)**

Claim 9 depends from claim 1 and is therefore patentable for the same reasons finding claim 1 patentable, as described in Part VIII(1), above.

The subject matter of claim 9 includes a prism mechanism capable of being positioned in an automated fashion in the path of a single-axis compound image for creating binocular images from the single-axis compound image. The Examiner alleges that the features of claim 9 are found in the Fehr reference.

The Examiner provides that "[t]he applicant is respectfully invited to review the rejection as set forth in the previous Office action which showed that all of the features claimed in the present claims are disclosed in the combined product provided by the teachings of Fehr et al and Koyama et al." (See the Office Action of January 12, 2004, at page 3.) The previous Office Action (dated July 9, 2003) at page 5, approximately lines 5 – 10, states that the above features of Appellant's claim 9 are somewhere to be found in columns 3 and 4 of the Fehr reference, and that "the only feature missing from the microscope provided by Fehr et al is that they do not disclose [sic] that the microscope has an illumination system comprises [sic] a light transmitted system and a fluorescent system."

Quite the opposite, however, the Fehr reference merely discloses a non-automated slide and lock system for exchanging objectives manually. Indeed, column 3 (approximately lines 31 – 35 and 46 – 54) describes a manually sliding device that engages a proper position by resting against an

end wall at the bottom of a slide and locks in position at the top of the slide to keep from sliding to the bottom.

Clearly, the plain language of Appellant's claim 9 requires that the prism mechanism be capable of automated movement. Therefore, because the Fehr reference fails to teach or suggest a prism mechanism capable of automated movement and further because the Koyama reference fails to cure the deficiencies of the Fehr reference, the instant rejection cannot stand. Accordingly, Appellant prays for relief from the Board.

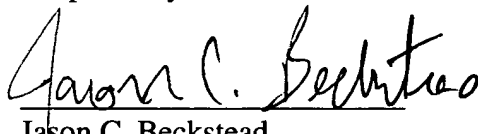
#### **XIV. Conclusion / Resolution**

For the foregoing reasons, relief from the Examiner's rejections and application of improper standards are prayed for.

The present Brief on Appeal is being filed in triplicate. Unless a check is submitted herewith for the fee required under 37 C.F.R. § 1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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	Mariann Tam

**APPENDIX**

**CLAIMS 1 - 20 ON APPEAL:**

1. (Previously presented) A microscope for viewing samples stereoscopically or compoundly, said microscope comprising:
  - a stereo objective;
  - a compound objective;
  - an objective housing, said objective housing holding said stereo objective and said compound objective, said objective housing enabled to swap said stereo objective with said compound objective or said compound objective with said stereo objective in a viewing path of the microscope;
  - a microscope body;
  - a light for providing brightfield illumination for use with both said stereo and compound objectives; and
  - a light for providing fluorescent illumination for use with both said stereo and compound objectives.
2. (Withdrawn) An optical microscope system that permits three optical viewing techniques, said system comprising: means for viewing samples in one of three dimensions, two dimensions, and macro with reflected light fluorescence and transmitted light brightfield; and means for sorting said samples under stereo fluorescence illumination and for verifying detail of said samples under compound optic fluorescence illumination.

3. (Withdrawn) The optical system as defined by claim 2, wherein said means for viewing comprises one stereoscopic and two compound objectives.

4. (Withdrawn) The optical system as defined by claim 3, further comprising a transmitted light base for providing illumination for transmitted light brightfield for said stereo and compound objectives.

5. (Withdrawn) The optical system as defined by claim 2, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image created.

6. (Withdrawn) The optical system as defined by claim 3, further comprising a stereo microscope body that is shiftable about an axis in a position that is over the stereo objective or the compound objective.

7. (Previously presented) The microscope of claim 1 including:  
a second compound objective; wherein  
said objective housing is enabled to swap any of the stereo objective, the first compound objective, or the second compound objective in a viewing path of the microscope.

8. (Previously presented) The microscope of claim 1, wherein said objective housing swaps said objectives in an automated fashion.

9. (Previously presented) The microscope of claim 1, further including a prism mechanism capable of being positioned in an automated fashion in the path of a single-axis compound image for creating binocular images from said single-axis compound image.

10. (Withdrawn) An optical microscope system that permits three optical viewing techniques, said system comprising: means for viewing samples in one of three dimensions, two dimensions, and macro; further wherein

all three optical viewing techniques are capable of using either light for fluorescent illumination or light for brightfield illumination.

11. (Withdrawn) The optical system as defined by claim 10, wherein said means for viewing comprises one stereoscopic and two compound objectives.

12. (Withdrawn) The optical system as defined by claim 11, further comprising a transmitted light base for providing illumination for transmitted light brightfield for said stereo and compound objectives.

13. (Withdrawn) The optical system as defined by claim 10, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image.

14. (Withdrawn) The optical system as defined by claim 11, further comprising a stereo microscope body that is shiftable about an axis in a position that is over the stereo objective or the compound objectives.

15. (Withdrawn) An optical microscope system that permits at least two optical viewing techniques, said optical viewing techniques comprising: means for viewing samples in three dimensions and means for viewing samples in two dimensions;

wherein both at least two optical viewing techniques are capable of using either light for fluorescent illumination or light for brightfield illumination.



16. (Withdrawn) The optical system as defined by claim 15, wherein said means for viewing in three dimensions comprises one stereoscopic objective and said means for viewing in two dimensions comprises at least one compound objective.

17. (Withdrawn) The optical system as defined by claim 16, further comprising a transmitted light base for providing said illumination for transmitted light brightfield for said stereo and compound objectives.

18. (Withdrawn) The optical system as defined by claim 15, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image.

19. (Withdrawn) The optical system as defined by claim 16, further comprising a stereo microscope body that is shiftable about an axis in a position that is over said stereo objective or said at least one compound objective.

20. (Previously presented) The microscope of claim 7, wherein said objective housing swaps said objectives in an automated fashion.